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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 10/672,629 | 09/26/2003 | Glen P. Belvis | 1-Belvis | 8087 |

7590 11/15/2004

Glen P. Belvis
3623 Shakespeare Lane
Naperville, IL 60564

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| EXAMINER |
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GORMAN, DARREN W

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| ART UNIT | PAPER NUMBER |
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3752

DATE MAILED: 11/15/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/672,629

Applicant(s)

BELVIS, GLEN P.

Examiner

Darren W Gorman

Art Unit

3752

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-5 is/are pending in the application.
- 4a) Of the above claim(s) 4 and 5 is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-3 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date <u>11/28/2003</u> . | 6) <input type="checkbox"/> Other: ____ |

Art Unit: 3752

DETAILED ACTION

Election/Restrictions

1. This application contains claims directed to the following patentably distinct species of the claimed invention:

I. Figure 1

II. Figure 3

Applicant is required under 35 U.S.C. 121 to elect a single disclosed species for prosecution on the merits to which the claims shall be restricted if no generic claim is finally held to be allowable. Currently, claim 3 appears to be generic.

Applicant is advised that a reply to this requirement must include an identification of the species that is elected consonant with this requirement, and a listing of all claims readable thereon, including any claims subsequently added. An argument that a claim is allowable or that all claims are generic is considered nonresponsive unless accompanied by an election.

Upon the allowance of a generic claim, applicant will be entitled to consideration of claims to additional species which are written in dependent form or otherwise include all the limitations of an allowed generic claim as provided by 37 CFR 1.141. If claims are added after the election, applicant must indicate which are readable upon the elected species. MPEP § 809.02(a).

Should applicant traverse on the ground that the species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the species to be obvious variants or clearly admit on the record that this is the case. In either instance, if the

Art Unit: 3752

examiner finds one of the inventions unpatentable over the prior art, the evidence or admission may be used in a rejection under 35 U.S.C. 103(a) of the other invention.

2. During a telephone conversation with Mr. Glen Belvis on November 4, 2004 a provisional election was made without traverse to prosecute the invention of species Group I, claims 1-3 readable thereon. Affirmation of this election must be made by applicant in replying to this Office action. Claims 4 and 5 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

Information Disclosure Statement

3. The IDS filed on November 28, 2003 is hereby acknowledged and has been placed of record. Please find attached a signed and initialed copy of the PTO 1449.

Specification

4. The disclosure is objected to because of the following informalities:

Several apparent spelling errors were noted throughout the specification. For example, on page 1, line 5, "sold" should be changed to --solid--. Also, on page 1, line 28, "field" should be changed to --filled--, and "sold₂" should be changed to --solid CO₂--. Other instances occur throughout the specification including "value", which should be changed to --valve-- in such instances. The above list of noted informalities are merely exemplary and are not to be taken as an exhaustive list of all such instances. Therefore, Applicant should review the specification in its entirety and make amendments where appropriate.

Appropriate correction is required.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claim 3 is rejected under 35 U.S.C. 102(b) as being anticipated by Proni et al., USPN 6,442,968.

Proni teaches a fire-fighting system comprising: a CO₂ source (not shown – see column 6, lines 9-13); a pellet generating assembly (16 and 14) (see Figures 1, 2, and 5-7; and column 6, line 9 through column 8, line 65); the pellet generating assembly capable of generating solid densified CO₂ pellets (136); a pellet distributor (18 and 140) (see Figure 15; and column 3, lines 61-64; and column 8, line 66 through column 9, line 47) for distributing the pellets to a specified location, the system capable of generating and distributing a blanket of CO₂ pellets to cover the location. Proni expressly states that 600 to 800 pounds of CO₂ pellets can be generated per hour (see column 2, line 60), i.e. a quantity capable of creating a “blanket of CO₂ pellets to cover a location”. Note: The “pellet distributor” as recited in claim 3 can reasonably read on the “airlock (18) and “pellet outlet (140)” of the system shown by Proni, since clearly these elements are distributing the compacted pellets. However, one of ordinary skill would understand that the pellet outlet (140) would typically lead to an additional “distributor” since the pellets are entrained in an airflow, which conveys the pellets to their intended “point of use” (see column 3, lines 61-64).

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claim 1 is rejected under 35 U.S.C. 103(a) as being unpatentable over Proni et al.

Proni teaches a mobile fire-fighting system comprising: a liquid CO₂ source (not shown – see column 6, lines 9-13); a pellet generating assembly (16 and 14) (see Figures 1, 2, and 5-7; and column 6, line 9 through column 8, line 65); a first line (46) connecting the CO₂ source to the pellet generating assembly; a pellet distribution assembly (18 and 140) (see Figure 15; and column 3, lines 61-64; and column 8, line 66 through column 9, line 47); and a second line (defined by walls 20, 22, and 26) connecting the pellet distribution assembly to the pellet generating assembly; whereby the system is capable of generating and distributing densified CO₂ to prevent or extinguish fires. Regarding the elements associated with the system being a “mobile” system, Proni teaches that the system can be mounted to any of a variety of mobile vehicles, including a trailer or truck (see column 13, lines 29-47) for portable fire control use. Proni therefore anticipates a “frame”, “operations cab attached to the frame”, and the elements of the pellet generating and distribution assembly discussed above being “attached to the frame”, since these elements and this arrangement would be inherent to the entire “mobile system” if the pellet generating and distributing assembly is mounted on a truck (see again, column 13, lines 45-46).

Art Unit: 3752

However, although Proni expressly teaches providing a pressurized liquid CO₂ source (see column 6, lines 9-13), Proni is silent as to the specific mass/weight of the source.

Examiner takes Official Notice that the size of the liquid CO₂ tank is a results-effective variable wherein the quantity of liquid CO₂ is directly proportional to the quantity of CO₂ pellets that the system is capable of producing, and also the size of the fire that the system is capable of suppressing. Therefore, one having ordinary skill in the art would have selected a CO₂ source of at least about 10,000 pounds, in order to produce a sufficient quantity of CO₂ pellets to suppress and extinguish a fire of a certain size.

9. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Proni et al., in view of Bissen et al., US Patent Publication No. 2003/0066659.

Proni teaches a mobile fire-fighting system comprising: a CO₂ source (not shown – see column 6, lines 9-13); a first chamber (manifold 48) (see Figures 1, 2, and 5); a pellet densifier (14) (see Figures 1 and 2; and column 7, line 7 through column 8, line 50); and a pellet distributor (18 and 140) (see Figure 15; and column 3, lines 61-64; and column 8, line 66 through column 9, line 47); the CO₂ source being operationally connected to the first chamber via line (46), the first chamber being operationally connected to the pellet densifier via expansion tubes (64), and the pellet densifier being operationally connected to the pellet distributor via the passage defined within walls (20, 22, and 26). Regarding the elements associated with the system being a “mobile fire-fighting vehicle”, Proni teaches that the system can be mounted to any of a variety of mobile vehicles, including a trailer or truck (see column 13, lines 29-47) for portable fire control use. Proni therefore anticipates a “base”, “an engine”, “an operations cab”,

Art Unit: 3752

“a plurality of rolling means”, and “a fuel tank”, these elements being inherent parts of a truck on which the CO₂ pellet generating and distributing assembly is mounted (see again, column 13, lines 45-46). Further, note: While part of the “pellet distributor” portion of the Proni system includes the airlock (18) and the pellet outlet (140), one having ordinary skill would understand that the pellet outlet (140) would typically lead to a final distribution outlet, which conveys the pellets to their intended “point of use” (see column 3, lines 61-64) since the pellets are entrained in an air flow and conveyed from the airlock (18).

However, Proni lacks a pivoted boom, wherein the pellet distributor is positioned on the boom, the boom being affixed to the base through the pivot.

Bissen teaches a mobile fire-fighting vehicle (12) having a base (28) and a pivoted boom (14), wherein a fire-fighting material distribution outlet (18) is positioned on the boom, the boom being affixed to the base through the pivot (see Figure 1; and paragraph [0018] through paragraph [0019]), wherein control of the boom assembly position determines an accurate dispensing point for the fire-fighting material.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to include a pivoted boom assembly, as taught by Bissen, on the mobile fire fighting vehicle taught by Proni, and to position the final CO₂ pellet distribution outlet of Proni on the boom, in order to accurately control the position of the dispensing point for the CO₂ pellets.

Art Unit: 3752

Conclusion

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Darren W Gorman whose telephone number is 703-306-4205. The examiner may be reached at the above telephone number until November 23, 2004 and may be reached at (571) 272-4901 after November 23, 2004. The examiner can normally be reached on M-F 7:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dave Scherbel can be reached on 703-308-1272. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Darren W Gorman
Examiner
Art Unit 3752

DWG 11/9/04

DWG
November 9, 2004



David A. Scherbel
Supervisory Patent Examiner
Group 3700